DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of (i) claim 37; (ii) claim 47 (capsules greater than 100 microns in size); (iii) claim 49 (perceivable sensorial indicia generated by release of material from capsules is a color change of the aqueous carrier); (iv) claim 51 and also claim 52 (discrete event is a hand washing of various duration, recited in claim 52); (v) "a hand washing agent" from claim 39, the mixture of claim 61 as the aqueous carrier, trisodium phosphate as the material within the capsules from claim 65, and a polyvinyl acetate as the capsule material from claim 66 (i.e., a single aqueous carrier which entrains a plurality of aqueous stable polyvinyl acetate capsules which contain an amount of trisodium phosphate) in the reply filed on 9/22/2009 is acknowledged. The traversal is on the ground(s) that 1) the amendments to the claims include a special technical feature that makes a contribution over the Schnoring reference, therefore, the specie election requirement based on Schnoring should be withdrawn; and 2) with respect to species (i) election requirement, claim 38 does not recite a capsule wall thickness, but rather a capsule size, dependent from claim 37. This is not fully persuasive because the requirement based on the claims of record demonstrated lack of unity between each of species (ii)-(v), by the Schnoring reference. Additionally, the prior art rejection(s) outlined below still renders the technical feature lacking novelty and inventive step. Since there is currently no allowable generic claim, rejoinder of the species is not made at this time.

With respect to the species requirement under (i), applicant's argument is persuasive; the requirement for the species election under (i) is withdrawn.

With respect to the species election requirement for each of the species (ii)-(v), the requirement is still deemed proper and is therefore made FINAL.

2. Claims 48 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected specie, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 9/22/2009.

It is noted that non-elected times of claims 45-46 encompass the times recited in elected claim 52; the election of claim 61 components depends on claims 58-60; therefore claims 45-46 and 58-60 are examined to the extent of the species elected

Specification

3. The disclosure is objected to because of the following informalities: p. 8, lines 31-32 states "the invention may requires", which does not agree in singular/plural form of the subject and verb. On p. 14, last line, the phrase "For example, and washing agents" is grammatically incorrect.

Appropriate correction is required.

Claim Objections

4. Claims 1 and 60-61 are objected to because of the following informalities: claims 1 has periods after a, b and c, within the body of the claim. As outlined in MPEP 608.01(m), each claim must begin with a capital letter and end with a period; periods may not be used elsewhere in the claims except for abbreviations (which is not the

instant case). Claim 60, line 3 has a misspelling of "phenolphtalein" and claim 61, line 7 has the misspelling "phenolphthlein" (each of which should be phenolthalein). Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 32-33, 37-39, 45-52, 58-61 and 65-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 52 recites the broad recitation "between about 5 seconds and about 10 seconds", and other broad

ranges and the claim also recites “about 7 seconds” among other narrower ranges, which is the narrower statement of the range/limitation.

8. With respect to claims 65-66, the claims depend on a canceled claim (64). It is therefore unclear what subject matter is within the scope of claims 65-66.

9. Claim 64 recites the limitations "said material" and “said plurality of capsules” in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 65 recites the limitation "said capsules" in the first line. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 1 recites the limitation "...said plurality of aqueous stable capsules has a capsule wall with at least one **adjustable capsule rupture characteristic to vary delay** of release of said material…”. Additionally, claims 45-46 recite “…said at least one capsule rupture characteristic of said plurality of capsules **adjusts** to release said material between…[a time period]…after commencement of a hand washing event”. It is not clear from these phrases whether the capsule has in it some characteristic that can be adjusted within a given composition (as implied by the claim language; e.g., upon hand washing the thickness of the capsules is somehow changed, which can be controlled by the way hands are washed to change the thickness, resulting in different time releases based on the adjustment made), or whether the reference to an “adjustable capsule rupture characteristic” is only a reference to a parameter, such as the capsule size and/or thickness, which may be adjusted from one preparation to another preparation, but where no variable delay or capsule adjusting is required to be

present in a single given composition; the former is inconsistent with “a [one] composition” , to which the claims are drawn.

For the purpose of applying prior art it is assumed that the “adjustable capsule rupture characteristic to vary delay of release of said material” and related language in dependent claims is not required to be adjustable within an individual composition, since no such discussion was found in the specification.

12. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

13. Claims 1, 32-33, 37-39, 45-47, 49-52, 58-61 and 65-66 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The mixture of amended claim 61 is New Matter, not described in the specification as filed. It is noted that the components and parts of a combination containing 125 parts water, 18 parts sodium xylene sulfonate, 5 parts sodium toluene sulfonate, 1 part sodium dodecylbenzene sulfonate, 10 parts dodecyl phenol polyoxyethylene ethanol and 6 parts of an aqueous solution of polyacrylamide (12% wt/wt), brought to a neutral pH is disclosed at Example 1 (and 2). However, the combination of this mixture with 0.08 parts of a 1% (w/v) solution of phenolphthalein is

not disclosed in the specification as filed; additionally the broader "about" term applied to each of the parts is not disclosed in the specification as filed; for both of these reasons, the composition of claim 61 (and the elected composition as applied to all instant claims) is considered New Matter.

14. Claims 1, 32-33, 37-39, 45-52, 58-61 and 65-66 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claims 65-66, it is assumed that the intention was for claim 65 to depend on either of claims 1 or 2, for which this rejection basis applies.

Claim 1 recites the limitation "...said plurality of aqueous stable capsules has a capsule wall with at least one **adjustable capsule rupture characteristic to vary delay** of release of said material…". Additionally, claims 45-46 recite "…said at least one capsule rupture characteristic of said plurality of capsules **adjusts** to release said material between…[a time period]…after commencement of a hand washing event". These phrases indicate that there is a single physical or chemical parameter which is somehow variable within a given composition that will enable variation of the delay time period after handwashing commences; implying that some undefined manipulation will change the chemical/physical components of the composition to alter the length of time in which the capsule ruptures. A review of the specification did not result in the

identification of any such manipulation or parameter that is variable within a given composition nor how such a variation of delay or material release would be accomplished in a single given composition. Therefore, it is concluded that the disclosure does not provide sufficient description of compositions that have the claimed variable adjusting properties present within a given composition to demonstrate that applicant was in possession at the time of the invention of the claimed compositions.

It is noted that the specification and claims (e.g., 32-33) imply that changes in the thickness and size of capsules (a result of the specific preparation) will result in differences in the required amount pressure, shear force and/or length of application of the pressure/shear force used to rupture the capsules during handwashing, leading to an expectation of different rupture times for different preparations that have such differences in the preparations. However, it is also noted that the claims are not drawn to a series of compositions that have some varying characteristic from one composition to the next, but to "a [one single] composition" that has an individually adjustable characteristic present, which results in a rupture time variation applicable to the single composition. Compositions with this claimed characteristic do not have written description.

The MPEP states that the purpose of the written description requirement is to ensure that the inventor had possession, as of the filing date of the application, of the specific subject matter later claimed by him. The courts have stated:

> "To fulfill the written description requirement, a patent specification must describe an invention and do so in sufficient detail that one skilled in the art can clearly conclude that "the inventor invented the claimed invention." Lockwood v. American Airlines, Inc., 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir.

> 1997); In re Gostelli, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989) ("[T]he description must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed."). Thus, an applicant complies with the written description requirement "by describing the invention, with all its claimed limitations, not that which makes it obvious," and by using "such descriptive means as words, structures, figures, diagrams, formulas, etc., that set forth the claimed invention." Lockwood, 107 F.3d at 1572, 41 USPQ2d at 1966." Regents of the University of California v. Eli Lilly & Co., 43 USPQ2d 1398.

Further, for a broad generic claim, the specification must provide adequate written description to identify the genus of the claim. In *Regents of the University of California v. Eli Lilly & Co.* the court stated:

> "A written description of an invention involving a chemical genus, like a description of a chemical species, 'requires a precise definition, such as by structure, formula, [or] chemical name,' of the claimed subject matter sufficient to distinguish it from other materials." *Fiers*, 984 F.2d at 1171, 25 USPQ2d 1601; *In re Smythe*, 480 F.2d 1376, 1383, 178 USPQ 279, 284985 (CCPA 1973) ("In other cases, particularly but not necessarily, chemical cases, where there is unpredictability in performance of certain species or subcombinations other than those specifically enumerated, one skilled in the art may be found not to have been placed in possession of a genus …") *Regents of the University of California v. Eli Lilly & Co.*, 43 USPQ2d 1398.

The MPEP further states that if a biomolecule is described only by a functional characteristic, without any disclosed correlation between function and structure of the sequence, it is "not sufficient characteristic for written description purposes, even when accompanied by a method of obtaining the claimed sequence." MPEP § 2163. The MPEP does state that for a generic claim the genus can be adequately described if the disclosure presents a sufficient number of representative species that encompass the genus. MPEP § 2163. If the genus has a substantial variance, the disclosure must describe a sufficient variety of species to reflect the variation within that genus. See MPEP § 2163. Although the MPEP does not define what constitute a sufficient number

of representative species, the courts have indicated what do not constitute a representative number of species to adequately describe a broad generic. In *Gostelli*, the courts determined that the disclosure of two chemical compounds within a subgenus did not describe that subgenus. *In re Gostelli*, 872, F.2d at 1012, 10 USPQ2d at 1618.

The MPEP lists factors that can be used to determine if sufficient evidence of possession has been furnished in the disclosure of the Application. These include "level of skill and knowledge in the art, partial structure, physical and/or chemical properties, functional characteristics alone or coupled with a known or disclosed correlation between structure and function, and the method of making the claimed invention. Disclosure of any combination of such identifying characteristics that distinguish the claimed invention from other materials and would lead one of skill in the art to the conclusion that the applicant was in possession of the claimed species is sufficient." MPEP § 2163. While all of the factors have been considered, a sufficient amount for a *prima facie* case are discussed below.

In the instant case, the claims are drawn to a composition comprising a) an aqueous carrier; b) a plurality of aqueous stable capsules entrained in said aqueous carrrier, wherein each of said plurality of aqueous stable capsules has a capsule wall with at least one adjustable capsule rupture characteristic to vary delay of release of said material; and c) a perceivable sensorial indicia generated by release of said material from said plurality of aqueous stable capsules coordinated with occurrence of a discrete event.

(1) Level of skill and knowledge in the art:

The level of skill and knowledge in the art are high.

(2) Partial structure:

Figure 1 depicts a composition, such as a soap, with a carrier that conveys capsules; the capsules are depicted to have a single coating, with a material contained in the capsule. The material is released to generate perceivable sensorial indicia discrete event occurrence; taken to mean that when handwashing commences the pressure of rubbing the hands results in breakage of the capsule, releasing a dye, perfume, etc. at a specified time (a discrete event). By modifying the size of the capsule and/or the coating thickness of the capsule from one preparation to the next, the cumulative pressure required during the handwashing will vary between preparations, resulting in a difference in the average time the capsules will rupture following the start of handwashing, between two differently prepared compositions.

However, a review of the specification did not identify any parameter than may be adjusted to change the rupture delay time within a given composition, resulting in variable delay or adjusting to release within a single composition.

(3) Physical and/or chemical properties and (4) Functional characteristics:

The physical and or chemical properties of the composition require that there is some adjustable characteristic of a given composition that may be used functionally to adjust the time in which the capsule ruptures during handwashing. No such property has been described in specification as filed.

It is noted that p. 14, 3rd paragraph discloses that capsules are sufficiently stable or inert, if the capsule when entrained in the carrier substantially prevents the material within from being transferred to the carrier during the period prior to use. Additionally, the carrier may either solubilize in response to application conditions to release materials or rupture occurs in response to application force characteristics, or the capsules are soluble in application conditions allowing rupture by force characteristics. The only component of this disclosure that might be viewed as variable characteristic of the capsules within a given composition would be the solubilization of capsules; however, this embodiment is construed to be effectively removed from the scope of the claims by the requirement that the capsules are "aqueous stable"; i.e., the force applied during handwashing would be the remaining disclosed means of rupturing the capsules. Such a force does not lead to envisioning any variable characteristic of the capsule, only external pressure variations, or shear force variations (not within the scope of the claims drawn to a composition, not a method of washing hands). The disclosure does not lead to the conclusion that there is any disclosed characteristic of the capsules that is variable in a given composition.

(5) Method of making the claimed invention:

No method of making any capsule that has a variable rupture time within a given composition has been disclosed

As stated *supra*, the MPEP states that written description for a genus can be achieved by a representative number of species within a broad generic. It is unquestionable that claim(s) 1, 32-33, 37-39, 45-52, 58-61 and 65-66 is/are broad and

generic, with respect to all possible compounds encompassed by the claims. The possible structural variations are limitless to any characteristic of a capsule that will provide some type of adjustment to the delay time in which the capsules will rupture. Although the claims may recite some functional characteristics, the claims lack written description because there is no disclosure of a correlation between function and structure of the compounds beyond those compounds specifically disclosed in the examples in the specification. Moreover, the specification lacks sufficient variety of species to reflect this variance in the genus. While having written description of aqueous stable capsules that have a given average size and average capsule layer thickness in a single composition, the specification does not provide sufficient descriptive support for the myriad of adjustable capsule rupture characteristics embraced by the claims.

The description requirement of the patent statue requires a description of an invention, not an indication of a result that one might achieve if one made that invention. See *In re Wilder*, 736, F.2d 1516, 1521, 222 USPQ 369, 372-73 (Fed. Cir. 1984) (affirming rejection because the specification does "little more than outlin[e] goals appellants hope the claimed invention achieves and the problems the invention will hopefully ameliorate.") Accordingly, it is deemed that the specification fails to provide adequate written description for the genus of the claims and does not reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the entire scope of the claimed invention.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

16. Claim 65 is rejected under 35 U.S.C. 102(e) as being anticipated by Holzner et al. (US 7,204,998 B2; 2007; priority 2002 Nov).

17. Holzner teaches a microcapsule containing within a polymeric carrier material an effective amount of a fireproofing agent, wherein the fireproofing agent includes the elected compound trisodium phosphate (claim 1). It is noted that the examples disclosed would produce the required "plurality" of capsules.

Claim Rejections - 35 USC § 102/103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

19. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

20. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

21. Claims 1 and 32-33 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Casella (FR 2 805 162 A1; 2001 Aug 24; IDS 4/6/2007 reference; English Machine Translation of FR 2 805 162 A1 supplied by a USPTO translator, was obtained from the European Patent Office).

Locations cited refer to the Machine Translation provided.

This rejection is based on the alternate interpretation that the "adjustable capsule rupture characteristic" of the capsules recited in the claims Is a reference to parameters, such as size and thickness, that may be varied by modifying the preparation of the

capsules, but that that no variation is required within each capsule or a single given composition. The teaching of any microcapsules that contain a material is construed to meet the recited adjustable rupture characteristic claim limitations.

Casella teaches soap and a method for visual control of hand-washing (Description, p. 1, top paragraph); in the medical and sanitary field on of the main vectors of contamination and development of the infections comes from the transmission of the germs by the hands when bodily hygiene in not respected, this contaimination can be readily avoided by an effective and frequent washing of the hands, including liquid soaps (Description, p. 1, top paragraph); the soap contains a revealing agnet which changes color at the end of a time of predetermined washing, which is a visual control of an effective washing of the hands in order to obtain on aseptie optimum (therapeutic hand wash event; Description, p. 1, 2nd and 1st paragraphs); the revealing agent uses a dye contained in microcapsules, intervening change of color by decomposition or degradation of the microbeads or microcapsules, causing the release of the dye which mixes with the soap, the decomposition can intervene by friction, or chemical action (Description, p. 1, 3rd paragraph); revealing agent includes a chemical compound intended to react chemically with the soap to obtain modification of color into washing (Description, p. 1, last paragraph); the coloring agent as an example is methylene blue in microcapsules blended in liquid soap (Description, p. 2, 2nd paragraph); the index of indication of an effective washing of the hands is based according to the invention on the change of color of the soap at the end of a predetermined time, for example ranging between 20 and 30 seconds, at which

time the user will know by a visual control that the time of washing was respected (Description, p. 2, 4th and 6th paragraphs); decomposition of the microcapsules is accomplished according to the nature and structure of the envelope, including by friction effect causing a mechanical rupture of a zone of the envelope (Description, p. 2, 7th paragraph); the coloring agent can be methylene blue or other compounds that satisfy the standards of the food sector (Description, p. 2, 5th paragraph).

The teaching of a liquid soap containing microcapsules is taken to be an aqueous carrier with aqueous stable capsules entrained in the aqueous carrier; the colorant such as methylene blue in the microcapsules meets the limitation of an amount of material within the microcapsules; the plural form of microcapsules meets the requirement for a plurality of capsules; such microcapsules would characteristically have a capsule wall with the recited adjustable capsule rupture characteristic to vary delay of release of said material, a capsule wall thickness, and a capsule size; the colorant that changes color at certain times is taken to be a perceivable sensorial indicium generated by the release of the material from the microcapsules; the teaching of the changing of color at certain times during the washing is taken to meet the coordination with occurrence of a discrete event limitation (20-30 second timing to achieve a therapeutic wash).

It is noted that the English translation of Casella does not specifically state that the soap contains water or alternatively that the washing discussed involves water, either of which would satisfy the recited aqueous carrier component of the composition; or that the capsules are specifically aqueous stable. However, each of these claim

limitations is taken to be characteristically present in the document. "Soap" has the meaning of a surfactant used in conjunction with water for washing and cleaning, is a substance containing compound with hydrophilic (water loving) and hydrophobic ends, and made to mix with both oil and water; a liquid soap would be taken to have water present. Alternatively, it might be argued that either or both of these limitations (an aqueous carrier, and aqueous stable capsules) are missing from the teaching. If such a position is adopted, it would have been obvious to one of ordinary skill in the art at the time of the invention to use an aqueous based liquid soap, and to prepare the microcapsules using a material that is stable in the aqueous based soap, configuring the release of the colorant to occur as a result of microcapsule rupture due to the friction of washing, and to configure the characteristics of the microcapsules for rupture at the specific times taught, giving the instant claimed embodiments. The motivation to utilize an aqueous based soap would have been the common use of water in soaps and in the normal process of using water to wash hands; the motivation to utilize a material stable in the aqueous soap would have been to have a stable formulation; the motivation to configure the characteristics for an appropriate rupture time would have been to achieve the times taught for rupture of the capsules and release of colorant during the washing.

It is noted that In re Best (195 USPQ 430) and In re Fitzgerald (205 USPQ 594) discuss the support of rejections wherein the prior art discloses subject matter which there is reason to believe inherently includes functions that are newly cited or is identical to a product instantly claimed. In such a situation the burden is shifted to the

applicants to "prove that subject matter shown to be in the prior art does not possess characteristic relied on" (205 USPQ 594, second column, first full paragraph).

Claim Rejections - 35 USC § 103

22. Claims 65-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holzner et al. (US 7,204,998 B2; 2007; priority 2002 Nov) as applied to claim 65 above.

As discussed above, Holzner teaches a microcapsule containing within a polymeric carrier material an effective amount of a fireproofing agent, wherein the fireproofing agent includes the elected compound trisodium phosphate (claim 1). Additionally, Holzner teaches polymeric materials include polyvinyl acetate (col. 5, lines 5-8).

Holzner does not teach both elected components trisodium phosphate and polyvinyl acetate in a single composition, without selecting the components from two different listings in the patent. It would have been obvious to one of ordinary skill in the art at the time of the invention to prepare the trisodium phosphate encapsulated microcapsules of claim 1 using polyvinyl acetate as the capsule material. The motivation would have been the utilization of the specific materials taught by Holzner for the purposes taught.

23. Claims 1, 32-33, 37-39, 45-47, 49-52, 58-61 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Casella (FR 2 805 162 A1; 2001 Aug 24; IDS 4/6/2007 reference; English Machine Translation of FR 2 805 162; European Patent Office) as applied to claims 1 and 32-33 above, and further in view of Seitz et al. (US 6,977,082 B2; 2005; filed 2002 Mar, priority 2001); VanEanam (US 6,423,677 B1; 2002

Jul; filed 2002, priority 1995); Holderbaum et al. (US 7,205,266 B2; 2007; filed 2001); and Heile et al. (US 5,759,988; 1998).

The teachings of Casella have been outlined above. Casella does not teach any specific capsule thickness or size, such as recited in claims 37-38 and 47; nor the elected carrier mixture components required by claims 61; or the elected encapsulated material of claim 65.

Seitz teaches high efficacy antibacterial compositions having enhanced esthetic and skin care properties (title); antibacterial compositions having a high antibacterial effectiveness and excellent esthetic properties, contain a phenolic antibacterial agent, a surfactant and water (abstract); antibacterial cleansing compositions typically contain an active antibacterial agent, a surfactant and various other ingredients, for example, dyes, fragrances, pH adjusters, thickeners and the like in an aqueous carrier (col. 1, lines 42-45); exemplary surfactants include dodoxynol-12 and ethyloxylated dodecylphenol (dodecyl phenol polyoxyethylene ethanol; col. 10, line 50); hydrotropes have the ability to enhance the water solubility of other compounds, hydrotropes taught include sodium xylene sulfonate and sodium toluene sulfonate (col. 15, lines 1-2, 8-9; col. 18, lines 23-24); basic pH adjusters (col. 17, line 4); inorganic phosphates as buffering and chelating agents (col. 16, line 67 to col. 17, line 2); polyacrylamide as a suitable skincare agent (col. 64, line 69; col. 58, line 1-3); amounts of surfactants from 0.1-40%, amount of hydrotrope from 1-40%, 0.1-3% skin care agent (claim 1); pH range from 6.5-7.5 (a neutral pH (col. 17, lines 57-58).

VanEanam teaches surfactants used in aqueous cleanser/degreaser compositions (abstract); surfactants include sodium dodecylbenzene sulfonate (claim 7).

Holderbaum teaches rinse agent particles contain substances that include phosphates (col. 10, lines 7-8); sodium dihydrogen phosphate (Na_2HPO_4) is prepared by the neutralization of phosphoric acid with soda solution using phenolphthalein as indicator (col. 10, lines 48-51); Trisodium phosphate, Na_3PO_4 is readily soluble in water, and is prepared by concentrating a solution of exactly 1 mole of disodium phosphate and 1 mole of NaOH by evaporation (col. 10, lines 54-63); the phosphates combine several advantages, they act as alkalinity sources, prevent lime deposits and contribute toward the cleaning effect (col. 10, lines 20-24). This reference establishes that a color change in phenolphthalein from acidic conditions to basic conditions is observed, the color change occurring as a molar equivalent amount of Na_2HPO_4 is formed by adding a basic compound. When coupled with the teaching of Casella, the observation of Holderbaum is suggestive that such a color change for phenolphthalein as an indicator would be the type of color change discussed by Holderbaum upon breakage of the microcapsules.

Heile teaches an environmentally stable detergent article, where normally hygroscopic caustic detergent materials can be made resistant to absorption of ambient humidity or water by introducing a barrier coating onto the caustic detergent, rendering the highly active alkaline material safe for human handling, in order to obtain control

over dispensing, hydrophobic coatings can be nicked, split, pealed or partially removed, to provide an initial surface of detergent exposed to the water spray (abstract);

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a soap solution prepared using surfactants, hydrotropes and skincare agent compounds in an aqueous solution taught by Seitz and VanEanam as the aqueous soap solution phase of Casella; i.e., water, sodium xylene sulfonate, sodium toluene sulfonate, sodium dodecylbenzene sulfonate, dodecyl phenol polyoxyethylene ethanol and polyacrylamide. It would also have been obvious to include phenolphthalein as the indicating dye, and to adjust this solution to a neutral pH, as a carrier for the microcapsules of Casella. It would also have been obvious to incorporate trisodium phosphate as a base in the microcapsules, in an amount where upon rupture of the microcapsules by friction after a given time of handwashing, the soap solution will become more basic, shifting the color of the phenolphthalein to the basic form, as the color change of the Casella particles. The motivation to utilize the soap components recited in claim 61 would have been the recognized suitabilty of each of these compounds in soap solutions for antimicrobial efficacy, which would be expected to be suitable for handwashing. It would also have been obvious to optimize the amounts for hand washing/antisepsis, giving the recited parts of claim 61 as a result of such optimization. The motivation would have been the routine optimization of conditions. It would also have been obvious to utilize polyvinyl acetate as the material for encapsulation, for the reason that this material is water resistant and would be stable in the aqueous based carrier soap until the pressure of hand washing is applied, based on

the fact that it is known to be insoluble in water. The fact that this material is art recognized to be insoluble in water has been established on the record by applicant in the reply filed 9/22/2009, p. 7, 2nd paragraph. It would also have been obvious to optimize the parameters of the microcapsules, such as their size and capsule thickness to give the timing taught by Casella of about 20-30 seconds, in order to achieve the required timing for the color change during hand washing, which would have given the recited size and thickness limitations of claims 37-38 and 47. The motivation would have been to achieve the timing taught by Casella, for the amount of pressure typically applied during hand washing.

With respect to claim 52, the timing required by this claim is taken to be met by the teaching of times of 20-30 seconds, or at least rendered obvious by this time range taught by Casella. About is given the broadest reasonable meaning, to where about 15 is taken to encompass times ranging from half this amount to double this amount, i.e., from 7.5-30 seconds, a time range that the teaching of Casella falls within. Additionally, it would have been obvious to optimize the timing with the efficacy for antisepsis, which would have rendered the times recited in claim 52 as obvious, and then adjust the size and thickness of the microcapsules to correspond to the optimal time(s), giving the requirement of claim 52. The motivation would have been the routine optimization of conditions.

24. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Casella (FR 2 805 162 A1; 2001 Aug 24; IDS 4/6/2007 reference; English Machine Translation of FR 2 805 162; European Patent Office) as applied to claims 1 and 32-33 above, and

further in view of Seitz et al. (US 6,977,082 B2; 2005; filed 2002 Mar, priority 2001); VanEanam (US 6,423,677 B1; 2002 Jul; filed 2002, priority 1995); Holderbaum et al. (US 7,205,266 B2; 2007; filed 2001); and Heile et al. (US 5,759,988; 1998) as applied to claims 1, 32-33, 37-39, 45-47, 49-52, 58-61 and 65 above, and further in view of Holzner et al. (US 7,204,998 B2; 2007; priority 2002 Nov).

The rejection of claims 1, 32-33, 37-39, 45-47, 49-52, 58-61 and 65 has been outlined above. Casella does not teach the elected material of polyvinyl acetate.

Holzner teaches a microcapsule containing within a polymeric carrier material an effective amount of a fireproofing agent, wherein the fireproofing agent includes the elected compound trisodium phosphate (claim 1). Additionally, Holzner teaches polymeric materials include polyvinyl acetate (col. 5, lines 5-8).

It would have further been obvious to modify the composition rendered obvious, for the reasons discussed above by utilizing the elected polymeric material polyvinyl acetate, giving the elected composition of the claims. The motivation would have been the substitution of one material for another with the same art-recognized purpose.

Double Patenting

25. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

26. Claims 1, 32-33, 37-39, 45-52, 58-61 and 65 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5, 10 of copending Application No. 10/544586 in view of Casella (FR 2 805 162 A1; 2001 Aug 24; IDS 4/6/2007 reference; English Machine Translation of FR 2 805 162; European Patent Office); Seitz et al. (US 6,977,082 B2; 2005; filed 2002 Mar, priority 2001); VanEanam (US 6,423,677 B1; 2002 Jul; filed 2002, priority 1995); Holderbaum et al. (US 7,205,266 B2; 2007; filed 2001); and Heile et al. (US 5,759,988; 1998). The copending claims do not require each of the details of the instant claims, but are broader encompassing the instant claims. The teachings of Casella, Seita, VanEanam, Holderbaum and Heile have been addressed above. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the components discussed above in the copending material release system into a composition for handwashing, giving the instant claimed compositions. The motivation would have been for the reasons discussed above.

This is a provisional obviousness-type double patenting rejection.

Conclusion

27. No claim is allowed.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY P. THOMAS whose telephone number is (571)272-8994. The examiner can normally be reached on Monday-Thursday 6:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brandon Fetterolf can be reached on (571) 272-2919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy P Thomas/
Examiner, Art Unit 1628